

**REMARKS**

Claims 1, 3-4 and 7 remain for reconsideration. Claims 8-20 have been cancelled.

Applicants note with appreciation the withdrawal of the previous grounds of rejection. One new ground of rejection has been made by the Examiner in the final Office Action as follows:

1. Claims 1, 3-4, 7-10, and 14-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US 2001/0021051 to Kim in view of USP 6,239,359 to Lilienthal.

This rejection is respectfully traversed based on the following discussion.

Briefly, embodiments of the present invention relate to reducing clock jitter in an optical transceiver comprising a receiver and transmitter. The transmitter serializes data, converts it from electrical to optical, and transmits the optical data at speeds of 10 Gbps. At these high speeds, electromagnetic interference (EMI) from components of the transmitter can cause excessive clock jitter that may lead to data errors. An apparatus and method for reducing clock

jitter on a high speed optical transmitter is described. The transmitter comprises an oscillator, a phase lock loop, a serializer, and an electrical-to-optical converter.

The oscillator is enclosed in a metal shield to reduce the clock jitter. In one embodiment, the metal shield is soldered to a ground ring of a printed circuit board.

Referring to Applicant's Figure 3, the metal shield of the present invention differs from the prior art. In particular, claim 1 recites "one or more positioning protrusions perpendicular to the printed circuit board that enter into holes in the printed circuit board; and one or more attachment protrusions parallel to the printed circuit board **for soldering** the metal shield to the ground ring" (emphasis added).

The parallel protrusions refer to the protrusions 310 in Figure 3 and the attachment protrusions refer to the positioning protrusions 320 shown in Figure 3. The positioning protrusion may allow for precise alignment of the shield to the circuit board and the attachment protrusions 310 provide for a good solder connection to the circuit board.

The Examiner has relied again on Kim for teaching a transmitter with an oscillator , a phase lock loop (PLL), serializer and an electro-optical converter. The Examiner has recognized that Kim does not teach the claimed double set of protrusions and has therefore relied on the newly cited reference to Lilienthal.

In particular, the Examiner has relied on Figures 3-5 of Lilienthal for showing positioning protrusions 44 perpendicular to the board, and flange 26, parallel to the board.

However, it is noted that the purpose of the shield in Lilienthal is to provide a removable EMI shield. The abstract states “Preferred pegs comprises pairs of side-by-side prongs integral with the shield flange but extending downwardly therefrom. Each prong terminates in an oppositely directed, return-bent detent with the detent pairs functioning as a spring-biased latch for removably mounting the shield to the PWB.” (emphasis added).

Thus, the “flange” 26 is not analogous to applicants claimed “one or more attachment protrusions parallel to the printed circuit board **for soldering** the metal shield to the ground ring” since the flange is not suited for soldering or any other type of permanent connection to the board. Indeed if the flange of Lilienthal were to be soldered, it would defeat the stated purpose of Lilienthal. Thus, the combination cannot be obvious under 103.

In view of the foregoing, it requested that the application be reconsidered,

that claims 1, 3-4, and 7 be allowed and that the application be passed to issue.

Please charge any shortages and credit any overcharges to Intel's Deposit Account number 50-0221.

Respectfully submitted,

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/Kevin A. Reif/  
Kevin A. Reif  
Reg. No. 36,381

INTEL  
LF1-102  
4050 Lafayette Center Drive  
Chantilly, Virginia 20151  
(703) 633-6834

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Katherine Jennings